A Report of the

NATIONAL MARKETING SERVICE WORKSHOP

Louisville, Ky., Nov. 17-20, 1953

A Summary of Proceedings Including Recommendations for the Development of Marketing Service Programs Under the Agricultural Marketing Act

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
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PREFACE

At the suggestion of the Advisory Committee on Cooperative Work under the Agricultural Marketing Act with State Departments of Agriculture the 1953 National Marketing Service Workshop was held for the purpose of developing plans for an improved marketing service program. On the basis of the experience of the States with various types of work under this program and current needs for marketing service, the objective of the conference was to determine the kinds of marketing service work that will make the greatest contribution to the improvement of the marketing system for farm and food products.

The workshop was attended by 108 marketing specialists from 28 States, the Commonwealth of Puerto Rico, and the United States Department of Agriculture. These persons were divided into nine commodity groups: dairy products, cotton, grain, livestock, tobacco, deciduous fruits and tree nuts, vegetables, potatoes, and poultry and eggs. Each group had the tasks of (1) identifying each marketing problem on which action is needed for the commodity covered, (2) determining the kind of marketing service programs that will alleviate or solve the problem, and (3) making clear how the proposed program will solve the problem. The chairman of each group was a marketing man from a State, but the United States Department of Agriculture provided a consultant-secretary for each group.

Most of the time at the 4-day conference was devoted to the work sessions of the commodity groups. Such general sessions as were held were for the purpose of providing information that would assist the commodity groups in developing their programs. Speakers at these sessions were selected because of their ability to stimulate the thinking of these groups and to show the relationship that should exist among the various State and Federal agencies engaged in marketing work. Three roundtable discussion groups, composed of representatives of the States, brought before the general sessions types of marketing service programs that have proved successful.

This report on the conference summarizes the talks and discussions at the general sessions, sets forth the marketing service program developed by each commodity group as approved by the conference, and lists the persons in attendance. It is recognized that no State will need to adopt the complete marketing program developed at this workshop, but the marketing people in each State by studying these recommendations can select those activities that will make the greatest contribution to the solution of their marketing problems.

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PROGRAM

NATIONAL MARKETING SERVICE WORKSHOP

LOUISVILLE, KY. - NOVEMBER 17-20, 1953

Headquarters
Seelbach Hotel

Opening Session
November 17, 9:00 a.m.

First Day

9:00 a.m. — Ben S. Adams, Commissioner, Kentucky Department of Agriculture, Chairman
Greetings from the College of Agriculture, University of Kentucky--Dean Frank J. Welch
Plans for the Workshop --
William C. Crow, Acting Liaison Officer, State Departments of Agriculture, AMS, USDA
Barnard Joy, Assistant to the Administrator, ARS, USDA

10:00 a.m. — Meeting of Conference Groups.
Group I - Dairy Products
Harvey Weavers, Wisconsin, Chairman
Louis Herrmann, Marketing Research Division, AMS, USDA, Secretary
Group II - Poultry and Eggs
E. V. Coville, Virginia, Chairman
Hermon Miller, Poultry Division, AMS, USDA, Secretary
Group III - Deciduous Fruits and Tree Nuts
C. J. Carey, California, Chairman
Arthur Browne, Fruit and Vegetable Division, AMS, USDA, Secretary
Group IV - Vegetables
J. E. Youngblood, South Carolina, Chairman
K. W. Schaible, Fruit and Vegetable Division, AMS, USDA, Secretary
Group V - Potatoes
George Chick, Maine, Chairman
Paul Koenig, Agricultural Estimates Division, AMS, USDA, Secretary
Group VI - Tobacco
W. P. Hedrick, North Carolina, Chairman
C. I. Hendrickson, Marketing Research Division, AMS, USDA, Secretary
Group VII - Livestock
Matt Jennings, Tennessee, Chairman
Frank ImMasche, Livestock and Dairy Division, CSS, USDA, Secretary

Group VIII - Cotton
Fred Johnson, North Carolina, Chairman
E. J. Overby, Cotton Division, AMS, USDA, Secretary
Group IX - Grain
John Winfield, North Carolina, Chairman
Barnard Joy, ARS, USDA, Secretary

1:30 p.m. Roundtable discussion.
Improvement and Evaluation of Product Quality
Webster Birdsall, New York, Chairman
L. G. Foster, State Marketing Services Staff, AMS, USDA, Leader
Harvey Weavers, Wisconsin
W. C. Manhart, Indiana
W. P. Hedrick, North Carolina
George Chick, Maine

2:45 - 5:00 p.m. Meeting of Conference Groups.

8:00 p.m. General Session. William C. Crow, AMS, USDA, Chairman
Reorganization of the U. S. Department of Agriculture--O. V. Wells, Administrator, AMS, USDA
Consumer Education--Mrs. Miriam J. Kelley, Field Agent, Marketing and Consumer Information, University of Kentucky

Second Day

9:00 - 10:15 a.m. Roundtable discussion.
Market Information - Collection, Analysis, and Dissemination of Market Data
S. J. Gilbert, Iowa, Chairman
Paul Koenig, AMS, USDA, Leader
Walter Mason, New York
Walter Ebling, Wisconsin
F. Raymond Brush, Michigan
C. J. Carey, California

10:30 a.m. - 12:00 m. Meeting of Conference Groups.

1:30 p.m. - 2:15 p.m. Roundtable discussion.
Improvement in Market Organization and Facilities
William C. Crow, AMS, USDA, Chairman
Herbert E. Spencer, AMS, USDA, Leader
Fred Johnson, North Carolina
J. E. Youngblood, South Carolina
Webster Birdsall, New York

2:15 - 2:45 p.m. — Research on Livestock Auctions Points to a Need for Service Work--John G. McNeely, Professor, Agricultural Economics, Texas A. & M.

3:00 - 5:00 p.m. — Meeting of Conference Groups.

Third Day

9:00 - 9:30 a.m. — General Session. Roy W. Lennartson, Deputy Administrator, Marketing Services, AMS, USDA, Chairman

The Role of Research, Service and Education in the Solution of Marketing Problems--L. Y. Ballentine, Commissioner, North Carolina Department of Agriculture and Chairman, Advisory Committee on Cooperative Work under the Agricultural Marketing Act with State Departments of Agriculture.

9:30 - 11:45 a.m. — Meeting of Conference Groups.

12:00 m. — Tour - Brown & Williamson Tobacco Company

1:30 - 3:30 p.m. — Meeting of Conference Groups.

Fourth Day

9:00 - 9:30 a.m. — Meeting of Conference Groups - Review of Reports

9:30 a.m. — General Session. L. G. Foster, AMS, USDA, Chairman
Presentation of Group Reports - Group Chairman
Summary of the Conference--Roy W. Lennartson, AMS, USDA

12:00 m. — Adjournment

SUMMARY OF REMARKS OF CONFERENCE SPEAKERS

Ben S. Adams, Kentucky Department of Agriculture

The Workshop was opened by Mr. Ben S. Adams, Commissioner, Kentucky Department of Agriculture, who welcomed the delegates to the State and assured them of its hospitality. The Commissioner pointed out that the representatives of the State departments at the Workshop had the responsibility of developing marketing service programs that would improve the marketing system for agricultural products. He stated that he was sure that the large number of experienced marketing specialists who were present at the conference from so many States would accomplish this objective.

Dean Frank J. Welch, University of Kentucky

Greetings from the College of Agriculture, University of Kentucky, also were extended by Dean Frank J. Welch, who pointed out the progress that has been made in production research during the past fifty years and the pressing need that now exists for greater emphasis on solving some of the problems of marketing. He emphasized the need for a well-balanced approach to marketing problems by the initiation of more basic research and the development of a more aggressive service and educational program to secure adoption of research results by all segments of the marketing system.

William C. Crow, Agricultural Marketing Service, USDA

Mr. William C. Crow, Acting Liaison Officer, State Departments of Agriculture, AMS, in discussing plans for the Workshop at the opening session, pointed out that while for several years in one State after another useful work has been undertaken, it has not been possible to develop a well-rounded marketing service program nationally. The purpose of the Workshop, Mr. Crow indicated, is to develop a program which (1) will guide each State in developing its individual program, (2) can be presented to the various advisory committees operating under the Agricultural Marketing Act, (3) will help the U. S. Department of Agriculture select matched-fund projects for approval, and (4) can be presented to the various Committees of Congress in justification of the appropriations. He stated that in order to defend and develop this project it is necessary to have a definite program that will make a real contribution to the solution of marketing problems.

"As you know, marketing services consist of showing marketing agencies how to do a better job, and in helping them do it," he continued. "At this meeting we expect to develop a balanced, complete, and useful marketing service program for each of the nine commodity groups." In developing this type of a program, he suggested that each commodity group (a) develop

a list of the different types of activities that should be included in the program; (b) bear in mind that the appropriated moneys are not used to expand existing marketing services, such as market news and inspection services, or regulatory work; and (c) state concisely each kind of work that should be done, bringing out briefly, how to go about it, where to get the "know-how," what good it will do, and what kind of people should be hired to do it. "In formulating this program we do not want simply 'to get more information'," Mr. Crow said, "but should include only things that need to be done for a specific reason and that will bring definite results."

At the roundtable discussion Tuesday morning, Mr. Crow discussed the purpose of the Agricultural Marketing Act, some of the problems that have arisen in attempts to develop a marketing service program under it, and what has been done to meet these problems. He pointed out that this is the first national marketing service workshop, and that it was organized with a single purpose--to develop a well-rounded marketing service program. "The future of this program of Federal-State cooperation in marketing service work will be guided to a large extent by what you do here," he concluded.

Barnard Joy, Agricultural Research Service, USDA

Dr. Barnard Joy, Assistant to the Administrator, Agricultural Research Service, who followed Mr. Crow at the opening session, explained the operation of the conference commodity groups which were set up to develop marketing service plans. He emphasized the importance of a program statement for each recommendation that would clearly indicate the marketing problem that was to be solved by the proposed expansion of marketing service activities.

O. V. Wells, Agricultural Marketing Service, USDA

Mr. O. V. Wells, newly appointed Administrator of the Agricultural Marketing Service, USDA, emphasized the importance of cooperative relations between USDA and the State Departments of Agriculture and marketing agencies, adding: "We shall endeavor not only to maintain cooperative relations with the State departments, but also hope to find ways to increase both the amount and effectiveness of such cooperative work." He pointed out that USDA has recommended that funds for the Federal-State cooperative matched-fund projects be earmarked as a separate item in the Department's appropriation for the new fiscal year.

"We believe that this will answer some of the questions which have been raised in the past and will give a firmer basis for planning the kind of work to be carried out in the matched-fund field," Mr. Wells said.

The AMS Administrator also outlined principles followed in the recent reorganization of USDA, calling attention to the fact that one of the first

and chief goals in setting up the AMS was to organize that service in such a way as to insure that the Department's relations with State organizations and its services to farmers and those handling farm products would go forward without a break. Secondly, he emphasized that lines of authority must be clear with as little overlapping or "double layering" as possible; and thirdly, that program agencies be organized in such a way as to provide for a concerted or team attack on certain broad problem areas facing agriculture, rather than around a particular commodity. Mr. Wells also explained that within the Department the Agricultural Marketing Service is now responsible for all marketing research, for general statistical analysis and agricultural economic research in fields related to marketing; for crop and livestock estimates; coordination of all statistical activities; for a wide range of marketing services and regulatory acts; as well as for the relationships with State Departments of Agriculture growing out of the Agricultural Marketing Act. A chart showing the organization of AMS, used by Mr. Wells at the conference, appears on the next page.

Miriam J. Kelley, University of Kentucky

Mrs. Miriam J. Kelley, Field Agent in Marketing and Consumer Information, Kentucky College of Agriculture and Home Economics, in the general session Monday evening described a matched-fund project to aid orderly marketing of agricultural food products through a consumer information program. Using newspapers, television, radio and point-of-sale leaflets, Mrs. Kelley's program, which comes under the Kentucky Extension Service, informs consumers of seasonal supplies of farm products, aids them in "wisely spending" their food money, encourages better use of food to promote family health, and acquaints consumers with production and marketing problems.

Citing examples of the effectiveness of the program, Mrs. Kelley suggested that other State officials explore the use of consumer education services for assistance in meeting some of their marketing problems--particularly when they extend across State lines. Every State has products that people in other States are using and that they should be hearing about through consumer education services, she explained, offering the cooperation of her program in the marketing of products from other States which are sold in Kentucky.

John G. McNeely, Texas A. and M. College

An interesting address on the need for marketing service work for livestock auction markets was made before a general session of the conference by John G. McNeely, Professor of Agricultural Economics, Texas A. and M. College. He pointed out that research carried out by the Texas Experiment Station with the cooperation of USDA agencies has revealed a number of uneconomic and unsatisfactory practices at auction markets that are being continued for lack of service programs. Among the recommendations that he made for such service work were: (1) State departments of agriculture should consider procedures for studying, advising, and even regulating the number and location of auction markets, since small and poorly located

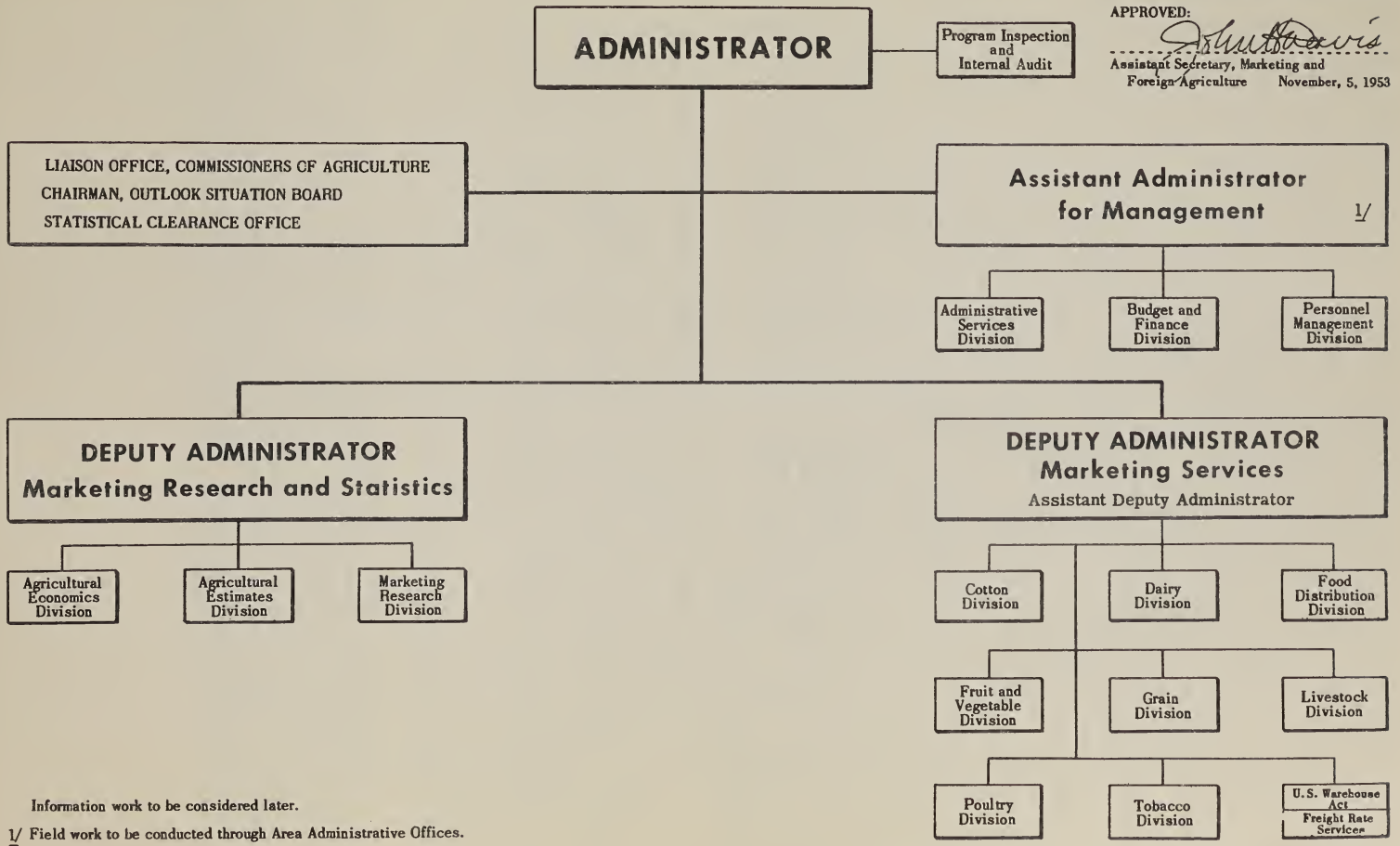
U. S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

RECOMMENDED:

Orris V. Wells
Administrator, Agricultural Marketing Service

APPROVED:

John H. Davis
Assistant Secretary, Marketing and Foreign Agriculture November, 5, 1953



Information work to be considered later.

1/ Field work to be conducted through Area Administrative Offices.

auctions usually lack sufficient volume of livestock and number of buyers to make an efficient competitive market. (2) A service program aimed at improving facilities should be developed which will benefit both auctions and their patrons, because in many of the present facilities, market yards are poorly arranged, there are improperly designed facilities for loading and unloading animals from motortrucks, a lack of catch pens for maintaining an even flow of animals to the holding pens, the rings are too small, there is a lack of seating facilities for the buyers, and a lack of proper size pens, as well as a number of minor inconveniences. (3) The Departments should maintain a program which will maintain livestock health and condition at the auction, for in many auctions there is a lack of a restrictive program to protect other animals from those infected with cholera and vesicular exenthema in hogs, anthrax and brucellosis in cattle and scabies in sheep. They should also consider the promotion of a program which will improve the handling of the animals in the yard to decrease the loss caused by bruising, such as the use of canvas slappers and skillful handling which keeps bruising to a minimum. (4) The Departments should consider a program for improving management practices. Stockyards and auctions covered by the Packers and Stockyards Act are subject to supervision by the USDA of commission and other charges, and management practices. An important aspect of this control is the requirement that the management refrain from selling or buying their own account. (5) Finally, the Departments should give consideration to the expansion of an experimental market news service which will provide producers with a yardstick by which they can compare prices they receive with those paid elsewhere for similar classes and grades of animals. One of the better areas for State service work is in the field of market news, he said.

L. Y. Ballentine, North Carolina Department of Agriculture

Mr. L. Y. Ballentine, Commissioner, North Carolina Department of Agriculture, and Chairman, USDA Advisory Committee on Cooperative Work under the Agricultural Marketing Act with State Departments of Agriculture, spoke at a general session on Wednesday morning on the role of research, service, and education in the solution of marketing problems. He discussed a number of important fields for State marketing service work; stressed the need for teamwork on the part of research, service, and educational agencies in the marketing field; and called upon the State agencies for cooperation in supporting the Federal-State, matched-fund marketing programs.

"This program can be strong and effective only to the degree of our participation," Mr. Ballentine declared. "Many of us want larger Federal appropriations for matching State funds, and we need more money; but we must be realistic and recognize that our chances for increased funds are lessened and the future of the program endangered by the attitude and response of many States. The Federal Government can aid the States tremendously through the marketing service program, but the burden of the work, the initiation and execution of the projects, rests heavily with the States.

It is up to the leadership in the States to produce and administer the programs needed to meet their demands. May I beg of you to do what you can to support and to interest other States in supporting the future development of this important program."

Roy W. Lennartson, Agricultural Marketing Service, USDA

Summarizing the results of the conference at its end, Mr. Roy W. Lennartson, Deputy Administrator, Marketing Services, AMS, pointed out that in administering the matched fund work over a number of years it became evident to officials in the U. S. Department of Agriculture that marketing service programs under the Agricultural Marketing Act would have to be developed by the States themselves. For this reason the workshop type of program was initiated in Baltimore in the fall of 1952. It became clear, as a result of the Baltimore Workshop, that a national workshop would be necessary, that considerable work and planning would be essential in order to assure that all interested States would have proper representation, and that such a workshop would have to be organized very carefully in order for those attending to obtain the maximum benefit.

"It is evident from this meeting that the planning which has gone into the workshop has paid off and that the program has been outstanding in many respects," Mr. Lennartson pointed out. "The Commissioners, Secretaries, and Directors of Agriculture are to be commended for providing excellent representation not only from the standpoint of numbers but also for the character and ability of the men attending. Secondly, the commodity approach to planning marketing service programs such as has prevailed at this Workshop appears to be the most practical one in that it has been possible to establish a more concentrated community of interest on the part of specialists in these fields, and there is a tendency for us all to approach our marketing problems on a commodity basis at both the local and national levels. Also, the program was developed in such a way that subjects of broad interest to all commodity groups and extremely pertinent to marketing service programs were presented to the group as a whole, which has had the effect of broadening their perspective in connection with the marketing service programs."

"The results of this conference will be felt in a number of important ways," Mr. Lennartson said. "First, there are jointly established, clear-cut guidelines for each one to take back to his individual State to be used in developing marketing service programs in the future. Secondly, these programs will be of material assistance to the Advisory Committee on Cooperative Work with the States under the Agricultural Marketing Act at its meeting this winter. It is believed that it will be the first time this Committee will have placed before it a very good indication of the type of services the States desire to develop with matched funds. Finally, it provides the U. S. Department of Agriculture with a clearcut program of marketing services as reflected by the States engaged in its administration."

He stated that a national marketing workshop was held this year in California at which representatives of Experiment Stations, Extension Services, and State Departments of Agriculture were present, and that plans are already under way for a second conference of this nature to be held during the coming year. He considered this to be extremely appropriate because the coordination of the work of these various agencies within a State is going to become increasingly important in the future in order to avoid duplication in the various fields. Such conferences are essential to assure that the maximum contribution of the various agencies can be made to the field of marketing as a whole.

SUMMARY OF PANEL DISCUSSIONS

Improvement and Evaluation of Product Quality

The panel on the "Improvement and Evaluation of Product Quality" consisted of Harvey Weavers of Wisconsin, W. C. Manhart of Indiana, W. P. Hedrick of North Carolina, and George Chick of Maine.

Mr. Weavers stated that too large a proportion of dairy products in Wisconsin was of a grade that did not meet general consumer acceptance. To correct this situation several programs were initiated dealing with Swiss and American cheese, and whole milk to improve the methods of handling and processing to reduce poor quality production. He singled out particularly the work of the milk and cream quality improvement program in which the Department worked with creameries, and assistance was given in improving the handling of raw milk from the time the milk left the farm gate until it was finally processed. Tests made of quality at various steps in the marketing process indicated where poor quality originated, and corrective measures were taken. Preliminary estimates of the effectiveness of the program indicated that as of January 1953, over 80 percent of the butter sampled in the State was 90 score or better. This is a 16 percent improvement over the samples scored in January 1951, when the program started, and an 8 percent improvement over 1952.

Mr. W. C. Manhart of Indiana, pointed out that one of the major problems in marketing milk in Indiana was that of quality maintenance. In early phases of the program direct contact was made with milk processing plants to secure information concerning quality variations as they existed in various segments of the industry. This early work with these plants led to the passage of legislation in 1951 relating to standardization of quality of fluid milk and cream, and rules were promulgated which provided (1) standards for milk and cream for human consumption, (2) licensing of milk and cream graders, and (3) reports to the State Board of Health as to quantities of milk contaminated. Following passage of this act a great deal of time was spent in demonstrating the standards for milk and cream. The effect of this work was to raise the quality of milk suitable for human consumption and improve the quality of milk processed in its various forms.

Mr. W. P. Hedrick of North Carolina, stated that the major problems in marketing tobacco in North Carolina consisted of proper curing, grading, and handling of tobacco. To bring about improvement in these respects a total of 116 demonstrations in sorting and conditioning tobacco were held in 29 counties of the State last year, with an attendance of over 2,000 interested growers, Future Farmers of America, and 4-H Club members. Eight additional demonstrations were held on warehouse floors at the request of warehouse operators, the results of which netted several

hundred thousand dollars to producers who put the suggested grading and handling practices into operation. Emphasis was given to sorting in sale lots as nearly as possible in conformity with standard grades and classes.

Mr. George Chick of Maine, discussed the problems of reducing costs and improving distribution of Maine potatoes. The Department has been working with growers and shippers in solving problems in packaging, handling, and distribution of potatoes. The results of shipping different size packages in various types of containers showed greater efficiency in unloading and handling and less bruising when potatoes were packed in the 15-pound package. Consumers preferred this size package, in the transparent bag, even when they were priced higher than other containers. It was found that little deterioration occurs when potatoes are shipped to market washed, but not heat dried. Elimination of heat drying reduced packinghouse costs by 3-3/4 cents per one hundred pounds.

Market Information - Collection, Analysis and Dissemination of Market Data

A panel in the morning of the second day on the subject of "Market Information--Collection, Analysis, and Dissemination of Market Data" was participated in by Walter Mason of New York, Walter Ebling of Wisconsin, F. R. Brush of Michigan, and C. J. Carey of California.

Mr. Mason stated that for many years apples grown in the Hudson and Champlain Valleys of New York have been sold f.o.b. at local points of storage. Frequently f.o.b. prices received in these areas varied widely between storage houses and with prices at terminal markets for the same variety, grade, and pack. Information was lacking for quantities, quality, and varieties available for market. To remedy this situation information from 200 growers and apple storage houses was provided during the main selling season (September through April) on f.o.b. prices according to grade, variety, size, pack, and condition; current demand; movement of apples into retail markets; quantities going out of storage; buyer inquiry; terminal point prices; f.o.b. prices in other States; processing prices; and cold storage holdings throughout the country. A brief summary of the apple supply situation was included. This information has served a useful purpose in reducing the wide variation in prices paid at local storage houses.

Mr. Walter Ebling of Wisconsin, stated that the Wisconsin Department was asked by the Wisconsin Farm Bureau Federation and the Equity Cooperative Livestock Commission Association to furnish information concerning the location and seasonal movement of various types of livestock in the State. These organizations were desirous of establishing local concentration markets where livestock would be assembled for sale. The information desired was secured and concentration yards located in accordance with the needs of the farmers of the State.

Mr. F. R. Brush of Michigan, indicated that there were requests for information concerning the location of various types of fruit trees by varieties and age groups. He stated that there was little information available on the potential production in various counties of the State. This information was provided as requested by various segments of the industry so that proper action could be taken to have available the needed facilities when expanded production was realized.

Mr. C. J. Carey of California, discussed problems that existed in marketing grapes and alfalfa hay. In-season surveys of raisin production were made in California which gave periodic information about the rate of harvest of grapes. These reports were used to guide grape growers in the proper utilization and orderly marketing of the various varieties of grapes adapted to table use, raisins, or wine making. Three years of sampling procedures of estimating raisin production established the procedure as sound, assisted in estimating the entire grape crop, and proved of invaluable assistance to all segments of the industry.

The problem relating to alfalfa hay was one of wide variation in price in various production areas in relation to prices at the San Francisco and Los Angeles markets. The Department established an experimental market news service on alfalfa hay that reduced the spread between local and terminal market prices of $5 to $10 a ton to a spread of $2.50 to $3.50 per ton. Both buyers and sellers have been benefited by the establishment of this service.

Improvement in Market Organization and Facilities

The panel in the afternoon of the second day dealt with "Improvement in Market Organization and Facilities." This subject was discussed by Fred Johnson of North Carolina, J. E. Youngblood of South Carolina, and Webster Birdsall of New York.

The program in North Carolina was one of maintaining the quality of cotton fiber through ginning processes. Mr. Johnson pointed out that the first approach to the problem was to make a complete survey of all existing gins and ginning equipment to see what improvements needed to be made to reduce "rough preparation" of cotton which caused a material discount in price compared to cotton that had been well ginned. Recommendations were made to the management of gins that needed improvements and assistance was given in seeing that the gin was put in efficient operating order. During the marketing season frequent calls were made on gins that were not doing an efficient job and the Department assisted the management in taking corrective measures. It is estimated that this service program has added to the income of North Carolina cotton producers in excess of $600,000 annually since its inception.

Mr. J. E. Youngblood of South Carolina, pointed out the inefficient operating conditions that existed in the Columbia, S. C. market which

led to the demand for the building of a new market. As a result of this demand his agency secured assistance from the Transportation and Facilities Branch of AMS in drawing up plans and specifications, and developing recommendations for the new market. The next problem was to secure sufficient backing from the trade and the city government to bring about the financing and establishment of the new facility. The Department made known the inefficiencies of the present market, assisted in the development of plans, promoted trade acceptance of the proposal, and assisted in developing a financial program for construction. The market has been constructed, adequately financed, and the increased efficiency is far greater than was originally anticipated.

Mr. Webster Birdsall of New York, described the work done in securing new market facilities for Rochester, N. Y. He explained that the approach of the New York Department was similar to that in South Carolina and recommended that State bureaus, departments, or divisions of markets take leadership in promoting construction of more efficient market facilities by giving assistance in the development of plans, securing trade acceptance, assisting in arranging for financing, and promoting construction after the plans have been completed. He stated that this type of activity should certainly come into the scope of what was contemplated by Congress in the passage of the Agricultural Marketing Act.

MARKETING SERVICE PROGRAM RECOMMENDATIONS

I. DAIRY PRODUCTS

Harvey Weavers, Wisconsin, Chairman
Louis Herrman, AMS, USDA, Secretary

The Dairy Products Working Group recommends that the following types of service programs be adopted to improve marketing of these commodities:

A. Improvement of the Quality of Dairy Products.

One of the most important measures that can be taken to maintain and expand the consumption of dairy products is to improve their quality. Increased consumption will be reflected in improved income to farmers and more profitable outlets for processors and distributors. Use of poor quality milk or cream, careless or improper processing, and inadequate protection through the channels of distribution result in defective flavors or other characteristics which create dislike for the products. At several points between farmer and consumer, marketing service work would reduce the amount of poor-quality dairy products. The following types of marketing service work would contribute greatly to the solution of this problem:

1. Aid dairy manufacturing plants in establishing and maintaining uniform programs for grading milk and cream received from producers. - Work should be carried on with dairy manufacturing plant employees to show them how to grade cream and milk uniformly according to appropriate standards by approved methods. The results should be recorded in data on the proportions of receipts in the different grades and on the effects on the quality of finished products. This program would require men trained in applying routine methods for rapidly examining milk and dairy products. The principal tests would be for odors, sediment, acidity, and bacteriological determinations. This program could be carried out most effectively on an area basis, through work with all plants in a county, or in a larger production area where production is less dense. It could be a separate project or part of a larger program in which assistance would be given also to producers having quality problems and to plants in their processing activities.

This project would do much to eliminate the greatest single source of defects in the quality of dairy products. Work of this kind has been done in Indiana, Minnesota, Mississippi, North Dakota, and Wisconsin. It could well be expanded in these States, and initiated in other States.

2. Advice and guidance to dairy farmers who consistently deliver milk or cream which fails to meet, or which barely meets, minimum grade standards. - Regulations requiring the rejection of unwholesome milk or

cream may efficiently reduce the quantity of poor raw materials and inferior finished products, but a study by the National Research Council has shown that frequent visits to dairy farms as a followup to examinations of milk at the plant has a decided additional effect in raising the quality of milk. The producer who, for lack of skill or care, markets poor milk or cream may, without assistance, be unable to locate and correct the source of his difficulty. This work may be done in conjunction with a grading program, either in collaboration with field men of the dairy plants or independently where plants do not have employees regularly doing field work. It requires men trained in the fundamentals of producing quality milk and cream. Mississippi has included such service as part of a milk quality improvement project, and it is an important step where the means are sufficient to carry out a complete program.

3. Assistance to dairy plant operators to locate and eliminate the causes of quality defects originating in their plants. - Plants receiving milk and cream of acceptable quality may produce butter, cheese, and other dairy products having poor keeping quality or other objectionable characteristics. Central dairy laboratories may be maintained to analyze samples submitted by these plants. Followup work may be carried on to aid the plant operator in locating and correcting the causes of any defects. Mobile laboratories may be maintained to provide thorough, on-the-spot studies of quality problems in the plants. Service work of this kind is of particular value to small or medium-sized plants which cannot afford sufficient laboratory facilities and technicians to solve their own quality problems. It would require highly trained technicians and well-equipped laboratories. Indiana, Minnesota, Mississippi, North Dakota, and Wisconsin have carried on service programs in this field, which they have demonstrated are effective, popular and need to be expanded. The programs could well be adopted by other States.

4. Maintenance of a continuing survey of the quality, grade and score of dairy products in retail stores to encourage uniformity of quality within brands, and to discover where quality has been deteriorating in trade channels. - There is evidence that dairy products deteriorate considerably if they are not properly protected in the retail store or while passing through the hands of the wholesaler or jobber, and that far too much deterioration takes place. Samples taken at the retail level would show the quality of products actually reaching consumers. The effectiveness of brands and of grade labelling programs could be increased on the basis of this information. Greater uniformity within brands would result in closer relationships between price and grade, and would increase the incentive for manufacturers and farmers to raise quality. A program of this sort would require the gathering of samples, grading by qualified graders, and reports of the results to the retailers and distributors. Field work in the stores and warehouses would require men trained to recognize situations unfavorable to maintenance of product quality. Work of this sort has been done in Kansas, Michigan, North Dakota, and Wisconsin.

The results of this type of work would be of most direct value to producing areas, but the problem exists also in distant consuming areas. It may be desirable to develop arrangements for interregional cooperation to make this type of service work most effective.

B. Collection and Analysis of Market Data for Dairy Products.

1. Assembling and analyzing data on utilization of milk. - Marketing problems of a long-time nature arise from trends in the utilization of milk and in the size of dairy plants. Special statistical studies are needed to show the quantities of milk of different qualities available in different counties or other small producing areas, and the uses made of the milk seasonally and annually. These data will be useful to plant operators planning to change their operations or to construct new plants, to cooperatives planning the consolidation of small plants, and to communities where the industry is contemplating a shift from cream to whole milk. Most of these uses for such data may be satisfied by special studies made at irregular intervals. The studies could rely in part on special analyses of data obtained in routine reports from dairy plants, and they might require special surveys of various kinds.

The problem of maintaining a close balance between the supply of, and demand for, grade A milk may require a more nearly continuous type of statistical service. During periods of shortage, accurate, up-to-date information on the location of supplies would promote efficient marketing by assuring complete utilization of available supplies in the highest value uses at the lowest expense for transportation and plant handling charges. In times of surplus, on the other hand, information on the locations of surplus supplies and unused processing capacity would avoid unnecessary marketing costs. Statistical analyses to aid in solving some of the problems enumerated above have been carried out in Louisiana, New York, South Dakota, Tennessee, and Wisconsin.

2. Assembling more detailed current information on prices paid for milk. - Greater detail on milk prices is needed to reflect the increased emphasis on the nonfat solids of milk. Price information is needed for smaller geographic areas, with more detail as to the quality and end uses of the milk. The required data could be obtained through refining and expanding the regular reporting programs now under way, and through special surveys to determine the nature of current pricing and buying practices. Such data would encourage the adoption of better pricing practices; would help farmers to choose the best markets, and would help plant operators in their procurement problems.

3. Assembling data on types and sizes of containers and channels of sale for packaged fluid milk and other dairy products. - Rapid changes have been taking place in the proportions of different types and sizes of containers being used for distributing dairy products, particularly milk, ice cream, and cheese. Also, the proportions of sales direct to

homes and through stores have been changing. To enable milk distributors to adjust their operations more effectively in line with the various trends, there is need for greater detail in the basic data in this field. The project could be carried out by providing for greater detail in the tabulations made during audits of dealers' records, or by tabulating more detail from the regular reports received by statistical and regulatory units of the departments of agriculture. Consumption can be stimulated by adoption of the most effective packages and channels of sale.

C. Improvement in Market Organization and Facilities for Dairy Products.

1. Assistance to dairy plants to improve plant layout and organization for greater efficiency.- Studies of costs in dairy plants show great differences among plants, attributable in many instances to differences in layout and organization. Research results are available on which to base recommendations for changes in individual plants, which will increase efficiency and lower costs. Provision of technically qualified men to advise dairy plant operators in improving existing plants and in designing new facilities would result in benefits to producers, processors, and consumers. Such work is already under way in Indiana.

2. Assistance to dairy plants and milk haulers in reducing costs of milk and cream assembly. - An important item of expense in milk marketing is the cost of hauling from farm to plant. Many practices develop which add unduly to the cost of this function. A qualified specialist available to consult with plant operators and milk haulers on the selection of equipment, the arrangement of routes, and policies concerning supply areas would do much to eliminate unnecessary costs.

3. Assistance in developing a more efficient cream procurement program. - In many States having large commercial dairy production, cream is still handled through primary and secondary receivers. This marketing channel is often unnecessarily long and time-consuming, as well as costly, even where the volume may be sufficient to warrant routes to move the cream directly from the farm to processors. Moreover, this marketing method is responsible for deterioration in quality between the farmer and processing plants. Aid should be given to creameries to replace stations with farm pickup routes where the density of production is sufficient, or to establish regular farm pickup routes in conjunction with stations having substantial volume. Studies should be made of the volume of business at specific locations as a basis for applying known standards for efficient assembly operations. Creameries should be assisted in developing other practices which would speed the movement from the station to the plant.

4. Promotion of milk consumption by assisting in the selection of milk vending machines and their proper location. - Consumption of milk will be increased by having milk accessible at as many locations, as much of the time as possible. Vending machines provide a useful means toward this end, but their success depends on the use of adequate equipment

and careful selection of locations. Lack of success resulting from poor equipment and improper location may unnecessarily retard this basically sound development. It would be beneficial to analyze and evaluate the sales potential of prospective locations and to advise operators of the probable success of machines in these locations. Research at Wisconsin and Cornell Universities has established some principles upon which such a service could be based.

5. Promotion of consumption of dairy products by helping distributors select packages and package materials, colors, and designs which will protect quality and attract favorable attention. - Dairy products presented in packages of nondescript appearance cannot compete most effectively with products dressed up with the best skills of modern merchandisers. In addition, dairy packages often fail to protect the quality of the contents adequately, as in the case of the single parchment wrap for butter. The smaller distributors, particularly, need technical help to select the most effective package materials and design. This program would require workers having training and experience in dairy packaging problems, and workers skilled in commercial art and the sales psychology of package design.

6. Assistance to dairy plants in reducing the amount of waste products and in selecting methods of treating wastes. - The waste products of dairy plants are difficult and expensive to treat before disposal when natural outlets are inadequate or unavailable. The difficulties can be greatly reduced by observing appropriate plant management precautions, and technical assistance can be given in carrying out such precautions.

There are practical ways of measuring and demonstrating the effects of waste-prevention measures. Waste prevention either eliminates the need for, or greatly reduces the cost of, waste treatment. Adequate waste treatment is costly, and involves complicated engineering problems. Plant operators can be helped in choosing waste disposal equipment, or in making equitable arrangements for sharing the cost of public sewage disposal facilities.

D. Training of Retailers and Distributors.

The committee recommends that, through cooperation of the U. S. and State departments of agriculture and the agricultural colleges, a program be developed for training handlers of dairy products, similar to the programs now being conducted by the United Merchandising Institute for fruits and vegetables and the Poultry and Egg National Board for poultry products.

II. POULTRY AND EGGS

E. V. Coville, Virginia, Chairman
Hermon Miller, AMS, USDA, Secretary

Following is a proposed marketing service program for poultry and eggs and their products as recommended by the Poultry and Eggs Working Group:

A. Statistical Information.

Many of the problems faced by various segments of the poultry industry--producers, hatcherymen, and marketing agencies--require a background of statistical information which often is not available. State marketing service agencies can assist these groups materially through collecting, analyzing, and disseminating the types of information which will aid in overcoming particular problems.

Two general types of statistical information should be considered. One type consists of so-called basic information, which reflects changes taking place in production or marketing patterns. For example, information should be provided on hatchery production, sources of eggs for hatching, farm production of the various types of commodities, processing capacity, and processing practices. This type of information would be obtained only as needed, and would not necessarily be on a continuing basis except as tied in with other programs. The second type of information is that which provides market price and market movement information. In recent years there has been a general trend away from the central market as a price-making influence. Many States have developed successful experimental projects to provide this type of market information directly from production areas.

B. Services to Processors and Handlers.

The introduction of poultry and turkey production into new areas, the intense concentration of production in certain areas, and accompanying rapid changes in processing and handling techniques have created and magnified problems for many processors. Although many processors have their own service organizations, or have access to services provided by commercial agencies, there are many who must be given direct assistance of a service nature if they are to make proper use of advanced processing and handling techniques discovered through research. The use of in-plant chlorination, new scalding techniques, and improved methods for chilling, packaging, and freezing poultry products are illustrative of recent developments which achieve market economies and improve the shelf life and preserve the quality of poultry products. Many processors need direct service assistance in applying such findings to their operations. Many also need assistance in making proper use of the equipment now used in modern poultry processing plants.

They also need help in coordinating the efficient use of this equipment with those plant layouts that will bring about the most efficient and sanitary operations. In many instances, these functions are carried on in connection with grading and inspection service programs. They should be adopted in all areas.

C. Improving Merchandising and Handling Practices.

In order to maximize returns to producers, as well as provide greatest consumer satisfaction with poultry products, the original quality of these products must be maintained through all channels of trade. It is desirable also that the quality of the product be properly identified to the ultimate consumer, and that the consumer be properly informed of the meaning of the quality designations used. Many of the activities necessary for maintaining quality and for informing consumers regarding quality are of a service nature. Others are of an educational nature, and therefore close cooperation between the service and educational agencies is essential to accomplish the entire objective. Service programs providing assistance to the poultry industry, aimed at reducing handling losses, fostering better packages and packaging, developing uniform methods for cutting up poultry, identifying products as to size and grade for the information of the customer, and assisting retailers with proper display and merchandising methods, will help accomplish the desired results. An example of work that is being done in this field is provided by the classes for retailers and others sponsored by the USDA, and conducted by the Poultry and Egg National Board in cooperation with other agencies and organizations. This work is aimed at demonstrating proper handling and merchandising methods to retailers. Federal support for this work will be terminated at the close of this fiscal year, and service agencies might well continue the service.

III. DECIDUOUS FRUITS AND TREE NUTS

C. J. Carey, California, Chairman
Arthur E. Browne, AMS, USDA, Secretary

The Deciduous Fruit and Tree Nut Work Group recommends the following types of marketing service programs that should be undertaken as matched-fund projects in cooperation with the U. S. Department of Agriculture under the provisions of the Agricultural Marketing Act:

A. Marketing Peaches of More Advanced Maturity.

Studies indicate that consumers are willing to pay more for peaches of more advanced maturity than for those commonly available. However, many growers and shippers of peaches, particularly in the Southeastern and Midwestern States, are reluctant to undertake the additional risks

associated with picking and packing at the more advanced maturities. Others find it impossible to train pickers properly and, at the same time, to supervise packing and loading operations.

Service programs for peach growers and shippers, such as those conducted in South Carolina, should be extended to other States. These programs should (a) show growers, picking foremen, and pickers the proper stages of maturity for picking peaches, in order to make the fruit more acceptable to consumers, (b) demonstrate improved methods of grading and packing to insure greater uniformity of pack, (c) encourage and assist packers to adopt precooling methods, such as "hydro-cooling," which make possible shipment of more mature peaches without excessive deterioration and loss, and (d) encourage packers to use types of containers and loading patterns designed to minimize quality losses in transit and handling.

B. Improving Apple Packing and Handling Methods.

Many apple growers, especially the smaller ones, in the Eastern and Midwestern States are penalized for failure to do a good job of grading and packing. Lack of uniformity of pack, use of containers that fail to provide adequate protection to the fruit, and poor loading methods result in unfavorable trade reaction and discounted prices.

Service programs by State departments of agriculture, such as those conducted in New York, Virginia, and Illinois to assist growers and shippers, should be extended to other States. These service programs should (a) show growers how to grade out and pack their crops to get the most out of them and still satisfy trade requirements, (b) assist growers to increase the efficiency and reduce the cost of their packing and handling operations through better organization of existing facilities and equipment or through the use of new and improved equipment, (c) encourage the erection of new packing or storage facilities where needed, and (d) coordinate efforts of growers, packers, receivers, and retailers in bringing about adoption of new types of containers that are lower in cost, facilitate efficiency in handling, or result in less quality deterioration during marketing.

C. Using Improved Containers and Packing Methods for Soft Fruits, such as Pears, Plums, and Cherries.

Conventional shipping containers for such soft fruits as pears, plums, and cherries, and the usual methods of packing these fruits, are expensive; in addition, they often fail to offer adequate protection to the fruits during transit and distribution. As a consequence, costs of marketing these highly perishable fruits are unduly high, and the consumer frequently must choose among bruised and unattractive products.

Considerable research is being devoted to the development of cheaper and improved containers, including consumer packages. As these

research results become available, service programs should be conducted, particularly in the Pacific Coast States, to acquaint growers and packers with the newer types of containers, and with methods of packing adapted to these containers. Not only will such service programs result in reduced marketing costs but they will make available to consumers fruit of more acceptable quality.

D. Improving Terminal Market Facilities and Handling Methods.

Growers of highly perishable crops such as deciduous fruits, as well as consumers, are penalized by the inadequate facilities and inefficient handling methods frequently found in terminal markets. Excessive and rough handling, together with exposure to unfavorable weather or temperature conditions, results in undue losses in quality and high costs. State departments of agriculture are particularly well qualified to work with terminal market receivers and distributors to secure the adoption of improved handling methods, installation of modern equipment, or erection of new facilities.

E. Better Retail Handling and Merchandising.

Produce departments in retail stores represent the producers' ultimate sales agent. Unless commodities are offered to the consumer in a state of freshness that encourages ready acceptance, the effort and expense that have gone into production and preparation for market are lost, or at best made unprofitable. State department of agriculture service programs with retailers can do much to secure the adoption of better handling and merchandising practices.

Retailers should be encouraged and assisted to install holding and display equipment that will preserve quality and reduce risk. Likewise, they should be acquainted with and encouraged to adopt merchandising methods that will invite consumer acceptance and increase sales volume.

F. Expanding Market Outlets for Deciduous Fruits and Tree Nuts.

Growers, shippers, and processors of deciduous fruits and tree nuts often fail fully to exploit their market opportunities, because of lack of adequate basic information about the nature of their markets. To aid growers in expanding market outlets, the California State Department of Agriculture has conducted numerous national surveys of the marketing of such fruit products as raisins, dried prunes, canned ripe olives, and dates. These surveys have provided extensive information on distribution, retailing practices, and trade acceptance of various types of packs and sizes of containers, as well as the possibilities of developing distribution in new areas or to new types of users. Such surveys, which have proved valuable in guiding marketing plans of individual shippers or processors and as a basis for industry-wide advertising and promotion programs, should be extended to other States.

There is a need for developing new and expanded market outlets for sweet cherries, particularly in Michigan. Until the close of World War II, processing had provided a market for all but a small portion of the Michigan crop. With the sharp increase in plantings in recent years, this outlet is no longer adequate.

The Michigan Department of Agriculture proposes to conduct a service program to assist growers in developing the fresh market for these cherries. Growers and packers will be informed of suitable picking practices, types of containers, and methods of grading and packing to meet trade requirements. Potential buyers, such as truckers and terminal market receivers, also will be informed during the season concerning prices, volume and location of supplies, and maturity of the crop.

G. Providing Basic Data on Deciduous Fruits and Tree Nuts.

In recent years there have been substantial changes in the numbers of trees planted to produce deciduous fruits and tree nuts. In some areas there have been extensive tree-removal programs, particularly for certain less desirable varieties, while in other areas and for other fruits there have been extensive new plantings. Lack of definite information about these developments seriously hampers the planning of sound marketing for the affected fruits and tree nuts. Moreover, relatively few data are available on the production, acreage, utilization, and value of such minor fruit crops as raspberries, blueberries, blackberries, boysenberries, and currants.

Illinois, Michigan, Washington, California, New York, Virginia, and some other States in recent years have conducted tree surveys and reported numbers, by age groups, varieties, and geographic areas such as counties. Similar tree counts should be conducted in other States and repeated in all States periodically with interim annual checks.

Data from such tree surveys will assist materially in the formulation of marketing programs for particular varieties and types of fruit, guide growers in planning future plantings, and serve as bench marks for State statisticians in improving the annual production statistics on fruit and nut crops. In addition, production estimates, by leading varieties, for the major fruits during the marketing season would facilitate more orderly marketing and improve returns to growers. For the minor fruit crops, production estimates should be inaugurated in all States where these crops are commercially significant.

H. Developing Experimental Market News.

Recent developments in the marketing of deciduous fruits, such as the increasing use of motortruck transportation, the trend toward direct selling by growers to truckers, especially in the East and Midwest, and the marked expansion of processing in some areas, have created

a need for new types of market news. Growers should be provided with adequate current information on which to base their marketing decisions. Among the types of experimental market news service that have been tried in some States, and should be attempted in many more, are:

1. Reporting apple prices, f.o.b. storage houses. The reporting of prices for apples out of storage in the Hudson River Valley has narrowed the range of prices received for comparable varieties and qualities at the various storage houses and has raised the general level of prices received by growers.

2. Reporting of weekly disappearance of apples from storage. There is need for supplementing the USDA monthly storage reports on apples with more current information on disappearance from storage in order to guide growers in planning their sales programs.

3. Reporting truck shipments. Methods have been developed for reporting truck shipments of fresh fruits and vegetables from distant production areas such as Florida, Texas, and California. However, owing to different methods of marketing in areas closer to consuming centers, the problem of reporting truck shipments is much more difficult. Considerable effort is needed to develop satisfactory reporting methods.

4. In-season reporting of strawberries processed. California has inaugurated a market news service to report at regular intervals during the processing season the volume of strawberries processed to date in the major producing areas of the State. This service has proved of value both to growers and processors. Similar service should be inaugurated in other important strawberry processing States such as Tennessee, Arkansas, and Michigan.

I. Marketing Information on Fruit Harvests.

Growers of deciduous fruits in most States are not well enough organized and lack the facilities to do an effective job of promoting their products. State departments of agriculture, particularly in the East and Midwest, consequently can help growers materially by supplying the growers' potential customers with essential information on prices and supplies. Service programs developed in such States as New York, Illinois, and Indiana are of two types:

1. Information to truckers and terminal market receivers. By means of weekly bulletins throughout the fruit marketing season, potential buyers are informed of the progress of the crops, probable dates of maturity, volume and specific location of supplies, and prices.

2. Information to consumers. One method of broadening the market for fruits is to provide consumers with more information about these crops, especially when they are seasonally abundant. Service programs should be inaugurated or expanded to bring more information on availability of supplies, prices, and methods of using fruits to the attention of consumers through newspapers, radio, and television.

J. Certification of Virus-free Nursery Stock.

Usual certification procedures are wholly inadequate for the elimination of virus defects in deciduous fruit, small fruit, and vine and tree nut nursery stock. State department of agriculture projects for the development of satisfactory certification procedures, based on available research findings, were initiated by Michigan in 1948, California in 1950, and Minnesota in 1951. These projects are not only committed to the development of certification procedures for grading out virus defects in nursery stock but also to marketing service work with nurserymen in implementing the methods and procedures developed.

This work should be extended as rapidly as possible to other States in order to meet an ever-increasing consumer demand for better-quality nursery stock. Many of the virus defects involved are responsible for inferior-quality fruits which may not be detected by usual grading procedures; therefore, the elimination of such virus defects in nursery stock contributes directly to quality improvement in the final fruit product.

Another problem of certification of nursery stock has to do with dwarfing rootstock for fruit trees. Comparatively recent interest in the United States in the use of semi-dwarfing and dwarfing rootstock for fruit trees is causing concern among nurserymen and fruit growers as to the trueness to name of rootstocks available. The American Association of Nurserymen has given recognition to this problem by formally requesting the development of a certification program for such understocks.

Since these rootstocks were developed in England, nurserymen in this country are not familiar with the characteristics of the rootstocks and are in need of a service to assist them in giving the consumer a fruit tree of desirable performance. The popularity of fruit trees on these types of rootstocks is increasing rapidly among fruit growers and home owners, and a proper certification procedure developed at this time can forestall a possible chaotic situation which might otherwise develop in the future.

IV. VEGETABLES

J. E. Youngblood, South Carolina, Chairman
K. W. Schaible, AMS, USDA, Secretary

State departments of agriculture or other appropriate agencies are authorized to engage in matched-fund activities in several fields of work for the improvement of vegetable marketing. It is recommended that these agencies expand present programs or initiate new programs in these fields as follows:

A. Quality Improvement and Maintenance.

Field and packing shed demonstrations should be organized by State departments of agriculture, in cooperation with other agencies, to show the value of proper grading, packaging, and handling of vegetables being prepared for market. These demonstrations would be of particular value in assisting growers and shippers to interpret new and existing grade standards, to improve packs, and to reduce waste and losses through better methods of handling. Such assistance would result in more uniform quality of vegetables, properly packed in the most appropriate containers, and would enhance the reputation of the State or area as a source of dependable supply. It might be desirable to consider the use of special labels or brands for fresh and processed vegetables of superior quality.

The correct use of existing containers, and the designing of new containers which contribute to the maintenance of vegetable quality, also should be emphasized.

Because of the increased use of consumer packaging, a program should be developed to help growers, shippers, and wholesalers to improve their operations in this field. Special attention should be given to spinach, kale, carrots, tomatoes, and sweet corn at both grower and wholesale levels.

B. Basic and Local Area Market Information.

1. Collection and dissemination of information pertaining to available supplies of vegetables. - Potential buyers are not always aware of seasonal availability of vegetables in many areas. Periodic reports would advise the trade of their availability and encourage buyers to establish contacts with growers and shippers in producing areas. These reports might include information on the time of harvest of individual vegetable crops, the peak periods, estimated volume available, location of supply, and agencies in the producing areas where detailed information could be obtained. Such information would increase market outlets and widen the distribution area.

2. Truck movement information. - Information on the daily volume of truck movement is needed to supplement data on the daily carlot shipments from shipping areas. Since more than half the vegetable shipments originating east of the Rockies are shipped by truck, and the volume of truck shipments is increasing each year, this service is necessary to show total daily movement from shipping areas.

The solution to the problem is not a simple one. There is no uniform method of obtaining this information. In each State, methods of obtaining daily truck shipments must be devised either by adapting existing facilities or by developing other means of collecting the data. For example, in some States the information could be gathered at road blocks or quarantine stations established at State boundaries for the enforcement of State laws. In other States it may be feasible to utilize truck weighing stations. In States requiring mandatory inspection, information could be compiled from daily inspection reports.

3. Experimental market news. - The development and expansion of experimental market news should be promoted for various vegetables in areas where such information is needed and is not available through regular market news releases. In some States such service is not available for important vegetable commodities, and that situation results in "blind spots" in the national picture. Local growers and shippers are handicapped by the lack of over-all local information and of current information about competing areas and terminal markets.

C. Improving Market Organization and Facilities.

State departments should consider whether present market facilities in particular areas are adequate, and should recommend any needed changes. In this field there is a need for (1) surveys to determine the need for erecting new facilities or renovating old facilities, and (2) promotion and assistance in the adoption of improved operation of storage facilities for vegetables.

D. Expanding Market Outlets for Seasonal Surpluses.

There is a need for assistance in marketing miscellaneous and localized lots of vegetables for which organized and well defined merchandising facilities are not available.

In this connection, programs should be developed to assist growers and shippers in disposing of excessive supplies by locating additional outlets, so that such supplies may be diverted to processing plants, institutions, and markets outside of the normal distribution area.

V. POTATOES

George Chick, Maine, Chairman
Paul Koenig, AMS, USDA, Secretary

As with many other perishable food crops, potatoes are subject to considerable quality deterioration, damage, and loss in moving through marketing channels from the producing area to the point of consumption. Many of the problems encountered in marketing potatoes are basically the same for growers and handlers everywhere. A number of special problems occur, however. Some of these are peculiar to the early shipping areas, where crop movement is often compressed within a comparatively short period. Others are characteristic of the northern or late-crop areas, where the bulk of the crop goes into storage and moves out to the consuming centers over a longer period. They are as follows:

A. Growers and shippers need assistance in the proper grading, packing, handling, and merchandising of their crop.

Suggested action:

1. Aid growers and shippers in the interpretation of grades and standards.

2. Encourage shippers to adopt the sizes and types of packages that will meet consumers' acceptance, and to label them with either State, Federal, or private brands that can be readily identified by the consumer.

3. Assist growers and shippers in reducing deterioration of the product which occurs as a result of carelessness and improper handling methods.

B. With the introduction of consumer-type packages which call for more up-to-date machinery, the shippers and handlers need help in modernizing existing buildings and facilities.

Suggested action:

1. Furnish technical assistance to packers in the installation and use of equipment for cleaning potatoes, by washing, brushing, or other means which experimental tests have indicated to be profitable.

2. In early and intermediate shipping areas, encourage and give technical assistance to shippers and handlers in employing pre-cooling equipment and desirable new practices, including the addition of chemicals to eliminate spores causing various rots.

3. In the late-crop States, advise and assist growers and shippers in rearranging and improving old and obsolete storage houses.

4. Give technical aid to packers in the installation of more modern equipment and facilities for grading and packing.

C. Growers and shippers need more adequate marketing information than is now available on potato production, movement, distribution, and prices, as an aid to orderly marketing.

Suggested action:

1. Develop programs, in States where desirable and feasible, for assembling and disseminating to growers and handlers information on the progress of harvesting and distribution of the potatoes grown in competing areas.

2. Provide shippers with more adequate information on supplies of and demand for potatoes in nearby markets, to assure most effective distribution and use of the home-grown product within the State.

3. Growers in the western, midwestern, and other late-crop shipping States have repeatedly urged that separate production estimates be prepared and issued on the summer crop in the major late States; i.e., that part of the crop grown for marketing from July through September. Through this service, the growers would have a better measure of the actual competitive supplies of late potatoes for marketing in the late fall, winter, and spring months, and could make their marketing plans much more intelligently.

It is recommended that this proposal for reporting the summer crop separately be given necessary consideration by the USDA at the national level. It is an undertaking that would require integration among all the States concerned, since no State could effectively meet the desired objectives through its services alone.

D. Marketing research studies show that there is a lack of understanding on the part of many carriers, wholesalers, and retailers of the proper methods of handling potatoes to maintain their original quality.

Suggested action:

1. Work with wholesalers and retailers to foster proper methods and techniques in the receipt, care and display of potatoes to preserve quality and stimulate consumption.

2. Through the cooperation and integrated action of all agencies concerned, foster and promote more efficient methods of loading and transportation, by rail and by truck, to prevent unnecessary damage and deterioration.

E. Most consumers are not kept adequately informed as to grade, size, types of package, and variety of potatoes.

Suggested action:

1. Through visual aids, demonstrations, and special displays in stores, and through other available means such as television, radio, and feature movies or film strips, provide the consumer with a clearer understanding of potato grades, sizes, varieties, and various types of packages on the market.

In these merchandising activities designed to explain and describe growing and marketing methods and practices for the consumers' benefit, the fullest cooperation can and should be obtained from the Extension Service, trade groups, and all other interested local agencies.

VI. TOBACCO

W. P. Hedrick, North Carolina, Chairman
C. I. Hendrickson, AMS, USDA, Secretary

A service program for improvement of tobacco marketing should be directed at the following problems: (1) Better preparation of tobacco for market; (2) proper handling and displaying of tobacco on sales floors; (3) increasing the scope of market information and extending the service to other areas; (4) appraising the adequacy of services and facilities available for marketing tobacco; and (5) promoting industry-wide cooperation by growers, warehousemen, dealers, and processors.

Programs to improve these activities are being carried on to some extent in a number of States. Similar programs are applicable to all areas in some degree. Suggested service work includes:

A. Better Preparation of Tobacco for Market.

Many growers could increase their returns with more careful handling and better preparation of their tobacco for market.

Some growers lack the proper facilities for sorting and packing their tobacco, particularly proper lighting. There is also a lack of knowledge of the best methods of handling tobacco and preparing it for market; for example, methods relating to the proper order or "case," the number of sorts, the size of the hands, the tying of the hands, the bulking, and loading.

The facilities needed and the proper methods to handle and prepare the tobacco should be demonstrated to groups of farmers and to

others who can, in turn, assist farmers. These demonstrations also should show the growers which groups and qualities of tobacco best meet the buyers' needs and the specifications of Federal grades.

B. Better Handling of Tobacco at Auction Sales.

There is considerable loss to the grower and to the buyers as a result of unsatisfactory conditions and improper handling of tobacco at auction sales.

The tobacco may be carelessly packed in the baskets and displayed in such a way as to jeopardize its value. The baskets may be spaced too closely, which makes it difficult to properly appraise the tobacco for inspection and sale. The lighting may be poor and there may be other conditions which adversely affect salability.

The growers should also be advised of their interest in an orderly and properly conducted auction. Programs designed to promote mutual interest and understanding between growers and warehouse operators in connection with proper handling, displaying, and selling of tobacco should be developed.

C. Improving Market Information.

Adequate and up-to-date market information on prices and other factors, for the various grades of tobacco, is necessary if growers are to take full advantage of changes in market situations.

There are some types of tobacco for which market information is not available. Some additional information, not now available, would be most helpful, particularly information on the changing needs of buyers and other factors affecting demand and supply.

Gathering and dissemination of additional market information should be considered, and projects set up, probably as pilot projects, to determine the best methods and the usefulness of such services.

D. Providing New Market Services.

The lack of certain market services or facilities is limiting returns to some growers. This is especially true of smaller growers and of limited areas. Farmers and others are frequently interested in providing for themselves some service or facilities that they lack.

There is need for advice from marketing specialists to these groups or individuals on the advisability of such a suggested service or facility. If the need is established, advice and assistance should be provided in setting up the kind of service or facility which would do the best marketing job.

E. Cooperation Within the Industry.

A smoother, more orderly and more efficient marketing system would develop if greater cooperation between all segments of the industry could be achieved.

Some States have obtained a high degree of cooperation by fostering committees consisting of industry representatives, growers, warehousemen, dealers, and processors.

VII. LIVESTOCK

Matt Jennings, Tennessee, Chairman
Frank ImMasche, CSS, USDA, Secretary

A marketing service program for livestock is recommended as follows by the Livestock Working Group:

A. Increasing returns through improving and expanding market outlets.

Many areas have livestock producers who do not have sufficient numbers of livestock of uniform quality to attract buyers locally or to enable them to ship to terminal markets. In such areas, there is a definite need for efficiently organized and properly conducted sales where these producers can consign their livestock for sale on a graded basis and where there will be sufficient volume of various grades to attract outside buyers. State departments of agriculture can render assistance in the following ways:

1. By scheduling sales with local livestock auction markets and arranging for consignments from producers.

2. By grouping animals to be sold into merchantable lots in accordance with the needs and desires of prospective purchasers.

3. By arranging for wider publicity so that buyers are fully informed as to numbers and grades of animals to be sold.

These services will prove helpful whether sales are of breeding animals, feeding animals, or fat animals.

In the case of wool, the market outlets for producers in certain areas can be improved through assistance in organizing producer pools.

Through these methods, producers will obtain increased returns and will be assured of income more directly in accordance with the quality of products they market.

B. Improving marketing facilities and practices through assistance to market operators.

Basic problems in the operation of local livestock markets involve facilities, weighing, proper handling of livestock, buying and selling practices, and other operating procedures. Great variation exists in the extent of these problems in the respective States due to the way the auction market system has grown up and the attempts to adapt the system to local conditions and preferences.

Once it is demonstrated that the State departments of agriculture can contribute to the improvement of market operations, much can be accomplished through cooperation with the auction operators. Each State should select the most critical market problem as a starting point, so as to be of greatest service. Such service may include information and assistance on the most desirable design and layout of the market; installation and operation of scales; the method of loading, transporting, and handling livestock; sanitation and disease control measures; and record keeping and accounting to buyers and sellers.

A comprehensive service program along these lines, designed to assist market operators in improving their facilities and practices, will be of benefit to all elements from producer to consumer.

C. Increasing returns to producers and encouraging marketing of the qualities of livestock most in demand by greater use of livestock and meat grades.

Grading of livestock and meats as the basis of sale is important in supplying to buyers the quality of product desired and in reflecting trade preferences back to the producer. While livestock prices at terminal and some local markets are reported by grade, many producers do not know how to apply the market information to their own livestock and, as a result, they are not in position to use the information to best advantage in determining where to market or how to price their livestock.

Assistance in grading livestock for local sales, as now carried on by several State departments of agriculture, is an effective method of filling this gap in our marketing system, and it should be extended. Also, local demonstrations in cooperation with the representatives of the market news services, the Extension Services, livestock associations, and marketing agencies should be encouraged.

D. Providing for more adequate and more timely information on marketing.

Livestock producers have need for more adequate and timely information that will enable them to do a more effective job of planning and carrying out their livestock production and marketing operations.

They should have information applicable to their particular area and type of livestock production. It should be sufficient, timely, and specific, so as to enable the producer to select the best time and place for marketing his livestock. Services which can be rendered by State departments of agriculture should include:

1. Wider dissemination of the information currently reported. This can be accomplished by special press, radio, or teletype services to local auction markets, where the information can be posted for use of producers and buyers.

2. Collection and dissemination of information on current local marketings, country trading, etc., not now being made available. All price quotations should be on the basis of actual observation of livestock sales by competent livestock reporters using official grade standards.

3. Collection of basic data and dissemination of information on livestock production and prospective marketings for an area, so that the data will be of value to the individual producer in planning his own marketings to avoid peak movements and to obtain wider buyer interest in his livestock.

4. Assembly and distribution of general information on the alternative methods of marketing and the factors to consider in using the different methods, such as costs, transportation, shrinkage, and disease problems.

5. In cooperation with the Extension Service and other marketing agencies, outlook information should be interpreted and adapted to local production and marketing problems.

The underlying objective in this type of marketing service by the State departments of agriculture should be to provide to the individual producer useful and needed information applicable to his particular production and marketing problems. Price information on local markets should be comparable with information now available for terminal markets.

VIII. COTTON

Fred Johnson, North Carolina, Chairman
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Needs and opportunities for cotton marketing services may be classified under four categories: (1) Mechanical and engineering problems in processing and handling; (2) development and promotion of more efficient marketing practices and more equitable business customs and usages; (3) development of conditions favorable to mechanical sampling, permanent

identification, and one-time classing and determination of fiber properties; and (4) increased consumption or disappearance of American-grown cotton. Obviously, personnel engaged in marketing services must be qualified and able to work effectively in the four fields indicated by this grouping. The working group on cotton recommends the following types of service programs be adopted:

A. Mechanical and Engineering Problems in Processing and Handling.

Gin machinery installation and operation presents many engineering problems. In the simple operation of separating fiber and seed, the fiber may be reduced in value as much as $20 per bale. To remedy this situation, various types of cleaners and driers have been developed. However, through inadequate engineering and unskilled operation of these seed cotton cleaning and conditioning elements, another major cause of fiber damage has been created. The cotton textile industry refers to these new problems as "overdrying and overmachining." Since there is yet no way to recognize these factors in the cotton standards for grades, this type of fiber damage cannot be properly accounted for by the cotton trade. Overdrying and overmachining weaken the cotton fiber and otherwise reduce its spinning value. Overmachining damages its spinning properties. So far the only practical approach to these mechanical or processing problems is to give technical assistance, on a gin-to-gin basis, by qualified technicians.

B. Improving Market Practices.

In some areas cotton is sold "hogground" or without recognition of grade, staple, or fiber values. Incentive for quality improvement is destroyed, and cotton from areas following such practices gradually acquires an unfavorable reputation in marketing channels.

It is recommended that a program be developed which would provide service specialists to attack this problem by (1) encouraging ginners and other representatives of organized cotton producer or distributor groups to send in samples for Government classing, (2) promoting the use of Government class cards, together with market news information and Government loan values, to assure farmers full value for their cotton, (3) showing local cotton buyers how it may be to their advantage to use Smith-Doxey cards in buying the cotton they need, and (4) encouraging growers, ginners, and buyers to attend cotton classing schools to understand better the determination of quality and value of cotton.

C. Packaging and Sampling.

The American cotton bale is one of the poorest packaged products seen in interstate and foreign trade. This results in great part from the practice of cutting samples from the side of the bale, which, when done repeatedly, leaves almost no bagging to cover the cotton.

There has been developed a mechanical sampler which automatically takes samples while the cotton goes through the gin.

It is recommended that every encouragement be given to adopt this or similar equipment which will do much to solve problems of both inadequate samples and poorly packaged bales.

D. Measurements of "Character" in Cotton.

Cotton quality is made up of grade, staple length, and "character." The first two have been recognized and measured in the cotton standards for many years. The item referred to as "character," however, is more difficult to measure and has not yet been well standardized.

In recent years several instruments and techniques have been developed for measuring the various fiber qualities. An experimental attempt was made in North Carolina this year to place one of these evaluations--micronaire readings for fiber fineness--on Smith-Doxey cards.

It is recommended that encouragement be given to the fullest use of each of these measurements at all stages of cotton marketing in order to improve the efficiency of handling by supplying the greatest possible amount of information about the quality of each bale.

E. Increasing the Efficiency of Handling Cotton in Warehouses.

The cost of moving cotton into, within, and out of warehouses can be reduced by several million dollars per year and cotton can be handled more expeditiously through proper handling methods and equipment. Further savings can be made by improving warehouse facilities. In many warehouse operations it is possible to reduce the labor required by as much as 50 percent.

Marketing specialists should fully acquaint themselves with the information available on the best kinds of handling equipment and methods for use in different types of warehouses, and on the most efficient design for warehouses. Then they should assist individual warehousemen in improving their facilities, in determining the kinds of handling equipment best suited to their operations, and in installing the most efficient handling methods.

F. Expanding Outlets for Cotton.

The cotton industry is faced with accumulating surpluses because of lack of sufficient outlets. This is resulting in a serious situation which is causing real concern in all parts of the Cotton Belt, and is making necessary the use of acreage allotments and marketing quotas in 1954.

Marketing specialists should promote all possible improvements in marketing practices which will reduce distribution costs and thereby improve the competitive position of cotton. Whenever new uses are found or developed by research agencies, every effort should be made to encourage their fullest use.

IX. GRAIN

John Winfield, North Carolina, Chairman
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The working group on grain recommends the following as major aspects of a marketing service program for grain:

A. Service work leading to the establishment of additional drying, storage and processing facilities in grain deficit areas.

In the grain deficit areas of the Eastern and Southern States, a major portion of the locally produced grain is sold at depressed prices, is handled inefficiently, and deteriorates in quality because of inadequate drying, storage, and processing facilities. Several other States have problems similar to those found in a study in North Carolina. In that State, a service program leading to the establishment of drying, storage, and processing facilities has resulted in higher prices in the fall, decreased handling costs, less loss in quality, and less insect infection.

Expansion of this type of service work should bring similar benefits to other States. It involves determination of volume of production and uses of grain, and the location and adequacy of existing facilities to handle it; followed by recommendations for the location, size, and type of farm and commercial facilities needed. The program then should encourage the establishment of needed facilities and the improvement of efficiency of existing facilities.

B. Establishment of laboratories to determine protein content and varieties of wheat.

Millers recognize the value of, and pay premiums for, wheat with high protein content and wheat of varieties that have the more desirable milling qualities. But the premiums paid for superior milling qualities are seldom received by the individual farmers who produced the more desirable grain. Many producers are not aware of the value of these recently identified quality factors. If the grower does know of them, it is very difficult for him to determine the degree to which his wheat possesses the desirable qualities. Testing laboratories should be established in commercial wheat producing areas to enable producers to determine the quality of their products and to use such information as

a basis for obtaining higher prices for better quality. Availability of such information, and the resulting price differential for high quality, would discourage the production of wheat of low-quality varieties and low protein content.

C. Surveys of space available for grain storage.

Lack of current information on the location of available space for storage of the current grain crop results in inefficient use of transportation equipment and unnecessary handling. Much open storage of grain on the ground, with the resulting costs of additional handling and loss of product, could be avoided if producers, railroads, truck operators, and grain handlers knew the amount of storage space available at various locations at harvest time. Knowledge of total storage capacity is essential, but surveys before and during harvest also are needed to determine the extent to which this storage is already occupied. Such information would also facilitate the efficient location of additional storage under Government programs. This type of information is needed in all major grain-producing States, and it should be widely disseminated to facilitate efficient handling of grain as harvested.

D. Establishment of laboratories to determine oil content of soybeans.

The value of soybeans to the extractor is determined largely by the oil content of the beans. Despite the availability of tests for oil content, beans are purchased from the producer on the basis of weight and moisture content, without regard to oil content, despite considerable variability in the oil factor. Farmers producing beans with high oil content should be able to get a price premium for superior quality if they knew the oil content of their product. To make this information available, laboratories where this test can be made should be established. An important result of this program would be more emphasis on the growing of varieties of beans having high oil content, and, consequently, greater oil production per acre.

E. Grain Grading.

Many producers and some handlers do not buy and sell grain as efficiently as they might because they are not familiar with and do not utilize grain grades and standards. State departments of agriculture, working cooperatively with the Extension Service, should expand the training program on grain grading to reach more producers, country grain dealers, and handlers, and should encourage buying and selling on the basis of grades.

F. Local Market News on Grain.

In some States, considerable variations in price received by producers at local markets which are near each other indicate that many

producers are not receiving the proper prices for their products. Experimental programs for reporting local markets should be undertaken to eliminate undue variations in local prices and to assure a fair return to producers.

G. Additional Recommendations.

Those engaged in service work are handicapped by insufficient knowledge of the design and cost of farm and commercial drying and storage facilities best adapted to local areas in the Southeastern States. Information is needed also on the savings that will result from preventing deterioration of grain and from reducing insect infestation by drying, improving storage, and fumigation. Because of this, the service workers suggest expansion of grain storage studies, particularly those which apply known principles to local area conditions and supply economic data on costs and savings.

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